# CUMBERLAND ISLAND NATIONAL SEASHORE



**GEORGIA** 

# RECOMMENDED:

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# APPROVED:

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# GENERAL MANAGEMENT PLAN

CUMBERLAND ISLAND NATIONAL SEASHORE Georgia

US DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE
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## SUMMARY

In February 1981 a proposed General Management Plan (GMP) and Wilderness Recommendation for Cumberland Island National Seashore was released to the public. The plan was combined with a Final Environmental Impact Statement (FEIS) which evaluated the environmental consequences of the proposal and its alternatives.

The noncontroversial wilderness recommendation was separated from the management plan and forwarded to Washington, D.C. for approval by the President and consideration by Congress. On September 8, 1982, Congress enacted Public Law 97-250 designating approximately 8,840 acres of Cumberland Island National Seashore as wilderness and approximately 11,718 acres as "potential wilderness."

After analysis of the proposal and alternatives presented in the FEIS/GMP and consideration of public comments, the National Park Service decided to reconsider its position on several controversial issues before approving the plan. The key issues reconsidered were:

- 1. A visitor ceiling of 1,460 people a day;
- 2. Development of campgrounds and other visitor facilities on the island's south end; and
- 3. A transportation system to carry visitors to selected historic sites and to campgrounds and day-use areas.

After reevaluating these proposals, a summary brochure was released to the public in November 1981 that highlighted the revisions to the February 1981 FEIS/GMP proposal.

The revisions essentially provide for a continuation of the existing natural character of the island, free from extensive development and intensive visitor use. The key features of the revised plan are:

- 1. Visitation is to remain at approximately 300 people a day and the NPS will provide an improved reservation system and will monitor the effects of visitor use.
- Camping will be provided at the improved campground at Sea Camp and at five primitive campgrounds. Semi-primitive camping will occur at Stafford and a small restroom provided. The proposed campground at Little Greyfield is eliminated.
- 3. A day-use area with a small restroom and picnic tables will be provided at Dungeness or Nightingale Beach.

- 4. Limited transportation will be provided to Plum Orchard on a reservation basis for guided tours of the mansion. The National Park Service will explore the possibility of transporting visitors to Plum Orchard by boat or horse-drawn carriage.
- 5. The mainland visitor center is to remain at St. Marys.
- 6. With the visitation ceiling remaining at 300 people a day, no major modification is proposed for the island docks or ferry boat operation. The Park Service will provide limited docking spaces for a few private boats. Those arriving by private boat will be included in the overall visitation ceiling.
- 7. The Park Service will contract for independent studies of the impact of feral horses on the island and will determine the best methods of managing the herd for the protection of the resources.

The General Management Plan provides overall management direction for Cumberland Island for the foreseeable future (approximately 5-10 years). However, the National Park Service is committed to routinely evaluating the effectiveness of its operations at Cumberland Island and to modifying its plans as necessary. Any significant changes to the GMP, including changes in visitation levels, will require public involvement.

Further detail on the management concepts included in this GMP will be provided through subsequent action planning documents and site plans such as Resource Management Plans, Development Concept Plans, Interpretive Plans and various site plans. These plans will be available for inspection at Park Headquarters, St. Marys, Georgia.

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#### STATEMENT FOR MANAGEMENT

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#### PURPOSE OF THE PARK

Cumberland Island is the southernmost and the largest of Georgia's offshore islands. It lies just north of the St. Marys River, which forms the Georgia/Florida State line. It was known to the Timucuan Indians as Missoe, Wissoe, or Tacatacuru.

The Spanish Governor of Florida established a permanent settlement on the island in 1562 after battles with French Huguenots made him determined to strengthen Spain's influence in the area. The Spaniards named the island San Pedro, and soon Franciscan missions were established. English influence later weakened the Spanish position, and by 1699 Spanish missions had all but disappeared from Cumberland and other Georgia islands.

General James Oglethorpe renamed the island the Highlands in 1736; a short time later he renamed it Cumberland in honor of a Scottish duke who had been kind to a young Indian in Oglethorpe's landing party. Spanish and English settlers inhabited the island, and it also became a refuge for debtors, criminals, and a group known as "Gray's Gang," followers of a Georgia legislator who had been expelled on charges of sedition.

Grants of Cumberland Island land were made by the English government in the 1760s but no extensive development took place before the American Revolution. In 1783 the Revolutionary War hero General Nathanael Greene bought land on the island with the intention of selling live-oak timber for shipbuilding. Greene died before he could arrange for a house on the island. His widow married their children's tutor, Phineas Miller, 10 years after Greene's death; and it was Phineas and Catherine Greene Miller who built the mansion called Dungeness. Catherine's descendants managed the Dungeness property until the Civil War.

Cotton and fruit became the major products of Cumberland Island. Crops were neglected when Union forces took the island during the Civil War. When landowners returned after the war, much of their property was ruined. A Confederate general named Davis bought Dungeness; later he sold it to Thomas Carnegie, brother of steel magnate Andrew Carnegie, who restored the property. Carnegie descendants were unable to maintain the property during the Great Depression.

The National Park Service rated Cumberland Island second only to Cape Cod in importance in a 1954 study of significant Atlantic Seaboard areas. Its outstanding natural, historical, and recreational values prompted its establishment as Cumberland Island National Seashore on October 23, 1972.

The establishing legislation, Public Law 92-536, describes the purpose of the park as "to provide for public outdoor recreation use and enjoyment of certain significant shoreline lands and waters of the United States, and to preserve related scenic, scientific, and historical values..."

## SIGNIFICANCE OF RESOURCES

Cumberland Island was designated a part of the National Park System because it is a remarkable seashore area of beach dunes, forests and uplands, and marsh. The outstanding beaches are enhanced by smooth, gentle, and predictable surf. While these beaches provide excellent opportunities for swimming, sunbathing, fishing, and beachcombing, other natural values on the island are conducive to pursuits such as hiking, camping, backpacking, and nature study.

In addition to these outstanding natural values, the archeology and history of Cumberland Island warrant special attention. Shell heaps from the Archaic period of 5,000 to 10,000 years ago mark village sites, and sand mounds containing human burials confirm prehistoric Indian occupation. Cumberland Island possesses historical values dating from this early occupation down through Colonial times, the plantation era of the mid-nineteenth century, and into the present.

#### RECREATION

Recreation will be a major element in the Cumberland Island program. The combination of about 18 miles of beautiful broad, sandy beaches and the relatively calm, clean ocean surf will undoubtedly attract many visitors who seek opportunities for swimming, sunbathing and beachcombing.

#### THE LAND

The sweeping beach lines on the east side of the island contrast sharply with irregular outlines formed by river, creek, and sound waters on the west. The beaches sweep gently upward from the surf, culminating in dunes as high as 50 feet. The dunes and beaches, mingling places of marine and terrestrial biota, present an interesting story in ecology. Building up from wind and ocean-borne sands on the east, dunes generally produce elevations that fall sharply toward the west. Occasionally the land may drop abruptly into a salt marsh or fall sharply into the sound. Free-flowing streams generally drain to the ocean and sounds from freshwater ponds and marshes west of the dunes.

#### **VEGETATION**

Several types of forest blanket the upland parts of the lands. Live oak up to 3 or 4 feet in diameter form the forest canopy with sebal palm, magnolia, red cedar, loblolly and longleaf pine, holly, red bay and a few other secondary species.

Saw palmetto may occur in dense thickets or may be broadly spaced, as are the understory shrubs. "Devil's-walking-stick" is a particularly interesting understory species. The luxuriant vegetation is further decorated by Spanish moss hanging from oak trees and by polypody fern on their trunks and limbs. Several species of grape, greenbrier, and other hanging vines contribute to a jungle-like appearance in some places, while at other locations the forest floor is open.

Other forest types include pine/live oak associations where the pine is dominant and the oak secondary, with a scattering of other species previously mentioned. Stands of nearly pure loblolly pine are also present. Many of these forests and part of the live oak stands are in second growth on cutover lands.

#### WILDLIFE

A number of land birds--hawks, vulture, dove, cardinal, flicker and robin frequent the forests. Almost 100 species of birds were identified on Cumberland Island and over adjacent waters during a 5-day period in early May.

The islands extending along Georgia's Atlantic coastline, known as the Golden Isles, are a portion of the vastly important Atlantic Flyway for waterfowl. The island annually supports large duck populations. Major species include ring-necked, scaup, mallard, gadwall, baldpate, canvas-back, pintail, green-winged teal and shoveler. Goose populations are erratic and without pattern.

The salt marshes are an interesting resource; they cover an extensive area, particularly on the west side of the island. Salt marshes provide a major feeding area for important game and commercial fish frequenting nearby estuarine waters. Moreover, these marshlands provide breeding and nursery habitats for various forms of wildlife such as the clapper rail, long-billed marsh wren, sharptailed and seaside sparrow, marsh rabbit and raccoon. Additionally, the marsh systems are of outstanding scenic value, and the rivers, creeks, and sounds provide premium recreation in boating and fishing. Spanish mackerel, channel bass, snapper, pompano, flounder, bluefish and speckled trout are among the fish taken for sport. Shellfish include the oyster and clam.

Deer are common. The gray squirrel is occasionally seen, and raccoon tracks are quite common. Of unusual interest among the mammals is the Cumberland Island pocket gopher (Geomys cumberlandius, Bangs, 1898) once found only on Cumberland Island. Other mammals include mink, otter, Norway rat, and cotton mouse. The diamondback rattlesnake also occurs here. Occasionally an alligator may be seen in some of the waters. The armadillo has recently been found on the island.

#### CULTURAL RESOURCES

Prehistoric Indians occupied and used the land from the Archaic period until European settlement. Spanish, French Huguenot, and British explorers, freebooters and settlers all knew the area well. Prior to the Civil War, cotton and rice were raised on plantations such as Stafford on Cumberland Island. After the Civil War, the island became a private retreat for prominent industrialists and businessmen. Plum Orchard and Dungeness are mute reminders of this bygone day.

Considerable evidence remains of Indian occupation at Cumberland Island National Seashore. Shell middens are abundant along the dunes and edges of the island; 36 locations of prehistoric cultural remains recently have been identified. Seventeen sites and two zones may qualify for nomination to the National Register.

Structures date from the Greene, Stafford, and Carnegie periods, with three large mansions and the remains of a fourth as striking evidence of the latter. Related support complexes that housed employees and supplied daily needs are still standing, as are approximately 20 stone chimneys of slave cabins. The Halfmoon Bluff area contains burial sites of a few of the blacks who worked plantations. Here also were houses presumably constructed by descendants of freed slaves. The First African Baptist Church, located very near the houses, is the second church constructed by the congregation; the original log church was built in 1893 and the present frame structure in 1937.

The Tabby House is the only standing structure associated with the Catherine Greene Miller period. This building, constructed about 1800, was the gardener's home. In the Carnegie period, it was remodeled for use as a bookkeeper's office. The structure is in good condition.

Several persons prominent in the island's long history are buried on Cumberland Island. The Miller-Shaw cemetery is located near Dungeness; Robert Stafford is buried just south of the Stafford mansion. Peter Bernardy, who purchased Plum Orchard Plantation in 1823, is buried at Plum Orchard; and many early residents of Cumberland Island are buried at Halfmoon Bluff Cemetery. A number of other historical features such as roads, gardens, plantings, rice berms, and canals have been identified.

#### MANAGEMENT ZONING

This section discusses land classification appropriate to present conditions. Land classifications proposed for future preservation and use are discussed in the "Plan" section.

Most of the seashore lands, consisting of beaches, sand dunes, marshes and uplands of oak and pine forest or palmettos, are managed as natural zones. Areas of Dungeness, Stafford, Plum Orchard, High Point/Halfmoon Bluff, and many archeological sites are managed as historic zones. Development zones exist at Sea Camp and Little Greyfield, and Little Cumberland Island is recognized as a special use zone. Private lands on the island could fall into all four categories of land classification.

Management in the natural zone is directed toward preservation of important plant communities and wildlife habitat, and it is intended that waterfowl and loggerhead turtle nesting areas be protected. A current primary effort to accomplish this purpose is the trapping and removal of feral hogs.

#### HISTORIC ZONES

The historic structures at Dungeness, one of which dates to about 1800, are managed as a historic zone. These historic resources consist of some 19 preservable frame and/or stucco buildings that are receiving either preservation or adaptive restoration treatment. Four of the structures house a Youth Conservation Corps camp for 8 weeks each summer. The historic carriage house is used as a park maintenance shop.

Preservable ruins (primarily foundations) in the Dungeness complex area will receive preservation treatment. Nonpreservable ruins are the frame portions of structures whose foundations will be preserved. Documentation of most of the Dungeness structures is being accomplished by the Denver Service Center, National Park Service.

The grounds surrounding these structures are mowed to maintain their historic character.

At Plum Orchard a 35-room, two-story mansion and a carriage house are under Park Service jurisdiction. The support structures—three two-story houses, garages and storage sheds, are held in reserved estates. The grounds are mowed to maintain their historic character.

All of the historic structures at Stafford—a large mansion with associated outbuildings and approximately 17 stone chimneys of slave cabins—are held in reserved estate. A portion of the plantation fields is moved to maintain the historic scene.

To the north of Plum Orchard and near the junction of Main Road and Kings Bottom Road are the ruins of 18 stone chimneys of the Rayfield Plantation slave cabins.

At Halfmoon Bluff, the First African Baptist Church has been acquired by the National Park Service and will be managed as a historic structure. Most of the lots that compose the black settlement near the church have been acquired. These will be managed as part of a historic zone.

Management strategy for these historic zones is the preservation of all structures that are in a preservable condition and documentation of nonpreservable structures with preservation of those features (stone foundations) that are preservable.

Restoration work has been done on a number of structures at Dungeness, and they are now in better condition than when received by the Park Service. A favorable opinion has been obtained from the Regional Solicitor's Office as to Park Service authority to carry out preservation treatment on historic structures situated on reserved estates.

The National Park Service is in the process of nominating all of these structures to the National Register of Historic Places. An assessment of archeological and historic resources has been completed by the Southeast Archeological Center and a historic resource study is available in final form.

## DEVELOPMENT ZONES

A development zone devoted primarily to visitor services exists at Sea Camp. It includes a visitor center with exhibit room and lobby, offices for rangers and interpreters, a 16-site campground, a bathhouse, an over-the-dune boardwalk, and necessary support utilities. These facilities were purchased from the Cumberland Island Holding Company. Management strategy is directed toward reservation camping to preserve natural features. The total number of campers is limited to 60, with no more than 6 per site.

Another development zone exists at Little Greyfield, once a subdivision, where six houses are provided for employees.

## WILDERNESS SUBZONE

Public Law 97-250 (September 8, 1982) designated 8,840 acres on Cumberland Island as wilderness and another 11,718 acres as potential wilderness when all existing reserved rights and uses have expired (see copy of Public Law 97-250 in Appendix).

The wilderness area includes most of the island north of Stafford, with the exception of uplands on Little Cumberland Island and large tidal creeks. The lands will be managed to protect wilderness values.

Qualified lands not now under Federal ownership are classified in the potential wilderness subzone. These lands include private property and State-owned intertidal areas. An area at the north end of the island in Federal ownership is also designated potential wilderness due to the extent of retained rights. Wilderness designation of any of these lands will occur upon publication by the Secretary of the Interior of a notice in the Federal Register that all uses prohibited by the Wilderness Act have ceased, on, in the case of State-owned lands, that title has been transferred to the National Park Service.

#### OTHER CLASSIFICATIONS

Little Cumberland Island is recognized as a special use zone, where property owners have entered into an agreement with the National Park Service (Appendix A). All the uplands of Little Cumberland Island are privately owned and not open to the general public. There are now about 1200 lots with approximately 25 homes on the island.

A number of archeological sites, primarily on the sound side of Cumberland Island, lie in the natural and historical zones. After the sites were assessed, 17 of them and 2 zones were recommended for nomination to the National Register.

#### INFLUENCES ON MANAGEMENT

# LEGISLATIVE AND ADMINISTRATIVE CONSTRAINTS

Public Law 92-536 of the 92nd Congress, S. 2411 (October 23, 1972) provides for the administration, protection, and development of the seashore in accordance with the provisions of the act that established the National Park Service in 1916, as amended and supplemented. Any other statutory authority for the conservation and management of natural and cultural resources may be utilized to further the purpose of the act. Cumberland Island National Seashore is a recreational area operated under the management policies of the National Park Service. Management constraints included in the establishing legislation are as follows:

Cumberland Island National Seashore is limited in extent to 40,500 acres; and is limited to \$28,500,000 for acquisition of or interest in lands and \$27,840,000 for development.

Owners of any improved residential property (construction of which commenced prior to February 1, 1970) may retain the right of use and occupancy of the dwelling and a reasonable amount of land associated with it for noncommercial purposes for a period of 25 years or for a term ending at the death of the owner or the owner's spouse, provided the lands and improvements are not required for administrative or visitor use.

When acquiring lands from the National Park Foundation and its successors and assigns, the Park Service must recognize the written terms and conditions of previous transactions. Retained rights to lands, features, developments, and facilities inhibit use and management of many historical and natural features within the legislative boundaries of the seashore.

Private, State, and other Federal agency lands lie within the legislative boundaries of the seashore. The Georgia Department of Natural Resources has jurisdiction over the tidal beaches and marshlands; the Corps of Engineers retains spoil areas near the south end of the island and Drum Point Island. The Department of the Navy retains title to this island and has easement rights on four marsh islands east and north of Drum Point. There is a Cooperative Agreement between the National Park Service and the Georgia Forestry Commission concerning fire management and close cooperation in the enforcement of other regulations on Cumberland Island. The legislation calls for mutual agreement between the Park Service and the Corps on plans relating to water resource developments.

The National Park Service has proprietary jurisdiction on Cumberland Island.

Hunting, fishing, and trapping will be permitted by the Park Service on lands and waters under its jurisdiction, in accordance with the appropriate laws of Georgia and the United States. Sport fishing could conflict with commercial fishing; hunting could limit other recreational use during its seasons.

No causeway may be built to the island. Except for certain portions of the national seashore deemed adaptable to recreation use, it will be preserved in a primitive state.

Little Cumberland Island will be maintained as a natural and scenic preserve by voluntary private action under a November 1975 agreement between the Little Cumberland Island Homeowners Association and the National Park Service.

#### REGIONAL INFLUENCES

#### Transportation

The closest major highway is Interstate 95. It is a major freeway of the interstate system that connects the Canadian province of New Brunswick with the southern coast of Florida. Passing through the major population centers of the Eastern Seaboard, I-95 connects cities up and down the coast with major east-west thoroughfares at Boston, Philadelphia, Richmond, and Jacksonville.

The present tour boat system can transport 300 people a day to Cumberland Island.

Jacksonville International Airport is a 30-minute drive via I-95 from St. Marys, the mainland headquarters for the seashore. The area is served by Delta, Eastern, National, Republic Airlines and Air Florida.

The Intracoastal Waterway runs down the Cumberland River and Cumberland Sound as a storm-protected shallow-draft boat channel from Norfolk, Virginia, to Key West, Florida. Pleasure craft and chartered boats use this waterway extensively.

#### Potential Intrusions

There are few visual and aerial intrusions on the serenity of Cumberland Island. Air pollution from the mill in St. Marys, Georgia, and Fernandina Beach, Florida, can be excessive on occasion, although there is no evidence at present of negative impacts from airborne pollutants on island vegetation.

#### Economic Influences

Brunswick Paper Company and Gilman Paper Company manage much of the mainland area adjacent to Cumberland Island as tree farms to supply their mills with pulpwood.

The United States Navy now operates Kings Bay, just north of St. Marys, Georgia, as the new refit site for fleet ballistic missile submarines. The development of this facility is expected to significantly affect the economic and social conditions of the immediate area and the region.

#### Other Recreation Areas

Beaches to the north and south of Cumberland Island have been heavily developed, and only a few short sections remain relatively untouched. To the south in Florida are Amelia Island Resort and Fernandina Beach; to the north, Jekyll Island and St. Simons Island, Georgia.

Fort Clinch, a Florida State park, is located on Amelia Island across Cumberland Sound from the southern tip of Cumberland Island. Crooked River, a Georgia State park, is on the mainland opposite Cumberland Island, and Fort Frederica National Monument is on St. Simons Island to the north.

There are a number of national wildlife refuges on the islands to the north, as well as several coastal research centers. Okefenokee National Wildlife Refuge is 50 miles west on the mainland. Visitation to these areas is increasing, but their potential has not been fully reached. There will be no overflow in the foreseeable future from these areas to Cumberland Island. Instead, Cumberland Island is developing its own use with visitors who are looking for the type of experience the island offers.

#### WITHIN-PARK INFLUENCES

## Privately Owned Land

At the present time, retained rights and private inholdings are the greatest within-park influences on park management. The statutory ceiling for land acquisition has been increased to complete the acquisition program. The following is an acreage breakdown by ownership:

OWNERSHIP	ACRES	
Federal		
National Park Service	18,019.01	
US Navy	139.00	
US Army Corps of Engineers	517.92	
- · · · · · · · · · · · · · · · · · · ·		18,675.93

State Submerged Lands Marshlands	10,723.41 3,096.33	13,819.74
Private Little Cumberland Island Cumberland Island 1/3 Interest in Marshland	2,109.30 1,805.31 96.08	4,010.69
TOTAL		36,506.36

## Dredging Operations

The Corps of Engineers maintains the Intracoastal Waterway. As a result of its dredging operations, the Corps retains two spoil areas within the legislative boundaries of the national seashore. One is near the island's south end, where a considerable amount of marshland has been filled over the years. The other area is Drum Point Island in the Cumberland River. The Corps has stated that "no dredged material is proposed to be placed within the boundaries of the seashore." This includes Drum Point Island.

No operation within the legislative boundary of the park can be carried out by the Corps without the approval of the Secretary of the Interior. Therefore, there are adequate ways to prevent actions by the Corps that would have a possible negative impact on the island resources.

#### Demand for Access

Visitation to Cumberland Island National Seashore now is about 35,000 to 40,000 per year. A National Park Service tour boat, capacity 149 persons, operates between St. Marys and Sea Camp on Cumberland Island twice a day, 5 days a week with the schedule extended to 7 days a week during the summer. Visitor demands for access to the island, particularly among campers and backpackers, at times are exceeding the capabilities of the present tour boat operation and the existing island facilities.

## Vegetation Damage

The Greyfield Land Corporation has grazed livestock on the island over the years. More than 600 acres of the corporation's land is fenced, with most of the cattle now confined to this pasture. Past grazing activity has had an effect on the island's natural resources.

Feral animals still roam the island. A cooperative effort between the National Park Service and the Greyfield Land Corporation resulted in the removal of 1,300 feral hogs from the island between 1977 and 1979.

Several hundred hogs still run free, and they are highly destructive to vegetation. The hog removal program continues. Approximately 250 feral horses graze the marsh grasses and dune-stabilizing vegetation. Research plots have been established to determine the extent of their effect on vegetation.

The effect of visitor recreation on park vegetation appears to be negligible, but close watch is being kept to ensure maintenance of park resources.

## Isolation

The island is approximately 6.5 miles by boat from St. Marys. All activity on the island must be supported by boat. All sanitation supplies, gasoline for vehicles, and materials and supplies for operations such as maintenance of historic structures and removal of feral animals must be carried to the island by National Park Service boats. In addition, the majority of the maintenance work force lives on the mainland. Round-trip transportation for these employees averages 1 hour per day; therefore, productive on-island time for each maintenance force worker averages 7 hours per day. These factors must be taken into consideration in budgeting and personnel allocations.

#### Climate

The coastal climate with its salt water and salt-laden air is highly corrosive to metals. This climatic condition has a very negative impact on vehicles, boats, and metal roofing.

## MANAGEMENT OBJECTIVES

## NATURAL AND RECREATIONAL RESOURCES

To protect and enhance the natural and recreational values of the park by encouraging environmentally compatible park activities and by providing an adequate mainland base to permit achievement of the park's purpose.

To manage the seashore, to the extent possible, in ways that enhance the natural geological processes of the barrier island system and mitigate human impacts on these processes. The following practices will help in the achievement of this objective:

To limit shoreline and dune stabilization to areas subject to damage or loss occasioned by human use and to allow natural movement of sand beaches and dunes.

To perpetuate the marsh and freshwater pond environments and forested areas in ways that promote natural ecological succession and minimize the adverse impacts of man's activities.

To manage wildlife in a manner that restores and enhances the natural ecosystem of the island environment. This is to be accomplished by the following practices.

To the greatest extent possible, remove feral hogs from the seashore lands.

To preserve or reintroduce rare and endangered species to the island.

To assure the preservation of dune areas that serve as nesting habitat for wildlife such as birds and loggerhead turtles.

To ensure that hunting, fishing, and trapping activities are compatible with the wildlife management program.

## CULTURAL RESOURCES

To identify and evaluate Cumberland Island's cultural resources including historic structures, archeological sites, and other remains and to preserve and make available as appropriate those determined to be significant and worthy of preservation.

#### ACCESS AND CIRCULATION

To provide for visitors' safe and reasonable access to the seashore from the mainland and to facilitate circulation on the island in a way that minimizes damage to the dunes, beaches, wetlands, and other environments.

#### INTERPRETATION

To foster appreciation and understanding of the seashore's ecological communities, the geological processes that shape the island system, the historical and cultural resources of the island, and the relationship between man's activities and the island communities and processes.

## SAFETY

To promote visitor safety in their use of the small island resources and to increase their awareness of the hazards associated with swimming, hunting, fishing, and other activities in the park.

#### DEVELOPMENT

To ensure the establishment of developments and services necessary to acquaint the seashore visitor with the resources, facilities, and services on the island and the various recreational resources of the region; to locate necessary interpretive, protection, and visitor use developments in areas of low resource value and to concentrate administrative developments on the mainland; to utilize design techniques and architectural styles that are compatible with the seashore environment; and to provide quarters for permanent and seasonal employees at locations considered essential for management and onsite protection purposes.

#### COOPERATION

To cooperate with the Corps of Engineers on plans relating to water resource development, Intracoastal Waterway management, and navigational dredging activities in the vicinity of Cumberland Island National Seashore.

To cooperate with the surrounding landowners, primarily the Brunswick Paper Company and Gilman Paper Company, with the communities of Brunswick and St. Marys, Georgia, and Fernandina Beach, Florida, and with the State of Georgia in minimizing adverse effects, such as air pollution, on the environment; in resolving conflicts between park objectives and other regional interest group objectives; and in developing a regional recreation complex compatible with the purpose of the park.

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## RESOURCE MANAGEMENT PLAN

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# THE PARK

Cumberland Island is located from 1 to 3 miles off the mainland coast of southeastern Georgia. It is bounded by the Cumberland River on the west, by St. Andrews Sound on the north, and by Cumberland Sound on the south. The entire island is in Camden County, where Woodbine is the county seat.

Temperatures of the coastal area are considerably more moderate than readings of the upper coastal plain. In fact, the 300-day frost-free period averages 50 more days than the growing season 100 miles inland.

In the winter the islands remain warmer than inland areas, and in summer they receive more rain. Snowfall is extremely rare. Average daytime Fahrenheit temperatures range from 72 degrees to 82 degrees in July, and from 44 degrees to 64 degrees in January. Temperatures drop below freezing only six times in an average year. The lowest temperature ever recorded on Blackbeard Island, for example, was 14 degrees and the highest was 104 degrees.

While the mainland experiences 90 degree temperatures more than 100 times a year, this level is reached fewer than 70 times a year along the coast. These moderate temperatures result from cooling ocean breezes that contribute to the pleasant environment and make possible long periods of recreational activities.

Relative humidity is surprisingly low, ranging from 46 percent average in April to 58 percent in December. Rainfall averages 52 inches annually, with each of the three wettest months—July, August, and September, receiving about 7 inches. Summer rainfall is characterized by brief, sometimes violent, showers. Severe droughts are uncommon; even the relatively dry autumn and winter seasons receive about 3 inches of rain per month.

Although tropical storms are not uncommon, the islands do not experience storms of hurricane force as often as most of the south Atlantic Coast. The maximum hurricance threat period is from late June to mid-October. Since 1757, 70 hurricanes or major tropical storms have occurred along the coastal area of Georgia--3 in June, 5 in July, 15 in August, 28 in September, 16 in October, and 3 in months outside this storm period. More precisely, only 9 very destructive storms have buffeted this coastal area since 1881--all during the normal storm season.

Cumberland Island will be managed to preserve nationally significant natural and cultural resources and, at the same time, to encourage environmentally compatible types of public recreation. The plan as presented here provides management guidelines that reflect existing

management problems and those expected as visitation increases. These general management strategies form the basis for a more detailed site-specific plan for management of park resources.

### NATURAL RESOURCE MANAGEMENT

### **BEACHES**

No vehicular traffic will be allowed on the beaches, except where this use has been permitted as part of an agreement between private in-holders and the National Park Service. Pedestrian use of the beach will be encouraged except in areas that are temporarily closed for the protection of wildlife or vegetation.

## **DUNES**

All public access over the dunes to beaches will be on boardwalks or along designated trails. No vehicular crossing will be permitted except for management purposes.

The dunes will be allowed to revegetate naturally as private vehicle use, and feral grazing are reduced. No vegetation program, fencing, or artificial stabilization will be undertaken.

# PLANT COMMUNITIES

Upland forests, freshwater and saltwater marsh vegetation, and dune vegetation will be maintained in a natural condition, with a special emphasis on maintaining habitat of endangered species. Following additional research, a natural fire management program may be implemented in wilderness areas where public or private facilities are not endangered.

### WILDLIFE

Feral animals will be removed where they are detrimental to natural and cultural resources, and they will be transported to the mainland. This policy will necessitate the complete removal of feral hogs and the close monitoring of the population size of feral horses. At present feral cattle have been contained and no longer roam the island freely. The feral horse population will be managed to insure a shealthy representative herd which should promote, in part, short-grass characteristics favorable for the nesting of shore birds.

Wildlife management will be directed toward the maintenance of natural populations. The reintroduction of natural predators will be made only after consultation with the Game and Fish Division of the Georgia Department of Natural Resources.

In conformance with the establishing legislation, controlled hunting and freshwater and saltwater fishing will be permitted under applicable State laws and regulations. Deer populations will be managed by controlled hunts and by direct management in the public use areas if those areas appear to be adversely affected by the removal of competing browsers. Hunting will be limited to areas northeast of Plum Orchard and hunting seasons will coincide with periods of lowest visitation. The control of insects will not be permitted except as necessary to maintain structures and insure visitor safety.

Endangered and threatened species will be preserved by implementation of management and development programs sensitive to the habitat needs of these species.

The U.S. Fish and Wildlife Service (July 9, 1980) has indicated that a number of Federally-recognized endangered or threatened species may occur in the area of Cumberland Island National Seashore. The endangered or threatened species identified by the U.S. Fish and Wildlife Service and the species' occurrence within the national seashore are as follows:

Species	Occurrence
Brown Pelican	Roost on sand spits on southern and northern tip of Cumberland Island
Red-cockaded Woodpecker	Suitable habitat but no known residents
Arctic Peregrine Falcon	Migrant
Cumberland Island Pocket Gopher	Small isolated population
American Alligator	Common resident of island wetlands
Manatee	Uncommon resident of seashore waters
Eastern Indigo Snake	No documented occurrence at national seashore
Loggerhead Sea Turtle	Nests on seashore beaches primarily in northern portion of the island
Kemp's Ridley Sea Turtle	No documented occurrence at national seashore

# Species

# Occurrence

Green Sea Turtle

No documented occurrences at

national seashore

Hawksbill Sea Turtle

No documented occurrences at

national seashore

Leatherback Sea Turtle

Only one documented occurrence at

national seashore

FIRE CONTROL

Wildfires that endanger life, unusual habitats, or improvements will be contained and extinguished. Other natural wildfires that appear to be restricted in their effects to small areas will be permitted to burn until the fuel is consumed—if the fires are similar to those that have given the island part of its character by their periodic interruption of succession in selected habitats. No larger wildfires will be allowed to burn unchecked unless a fire management plan has been prepared that substantiates the desirability of the burn in a given area. No prescribed burning will take place unless it is substantiated by related studies and a fire management plan. Ground fires will be permitted at campsites in the wilderness/potential wilderness area.

## CULTURAL RESOURCE MANAGEMENT

# BACKGROUND AND INTRODUCTION 1972-82

In 1972 when Cumberland Island was established the National Park Service was given responsibility for "an outstanding seashore area with excellent recreation qualities...not duplicated elsewhere along the coast, nor within the National Park System." (Seashore Recreation Area Survey of Atlantic and Gulf Coasts, 1956). The Service also acquired a large number of historic structures, many of which had not received any maintenance for 30 years.

Beginning in 1974 the National Park Service began to assess the structures under their control and make decisions regarding which ones could be preserved and which ones would be allowed to continue to deteriorate. Several factors influenced these decisions. Among these were the present condition of the structures, their architectural or historical significance, and whether the buildings could be utilized. The third factor dictated that the Dungeness Complex on the south end of the island, because it would be a focal point for visitation, would be given priority for preservation. By 1982 most of the preservation and stabilization work had been completed at Dungeness and work was underway at Stafford and Plum Orchard to the north. The plan that follows will discuss only those preservation actions that remain to be undertaken. Structures proposed for removal are also listed.

In 1975-76 an archeological survey of Cumberland Island was undertaken by staff of the National Park Service Southeast Archeological Center. Two archeological zones or districts and seventeen sites were identified as being eligible for the National Register. Since that time archeological investigations have continued and other sites have been located that may qualify for the National Register.

# CULTURAL RESOURCE MANAGEMENT PLAN

The National Park Service in consultation with the Georgia State Historic Preservation Officer and the Advisory Council on Historic Preservation will prepare a management plan for the cultural resources of Cumberland Island National Seashore. This plan will incorporate not only the management strategies set forth in the General Management Plan, but also will contain detailed information on historic and archeological resources not specifically discussed in this plan.

### HISTORIC RESOURCES

Twenty-three structures at Dungeness were identified as preservable. Of these, all but five have received preservation treatment. In the list of structures still awaiting preservation, the number to the right of the name of the structure is the order of significance (1=National, 2=Regional, and 3=Local). Management categories are A-must be preserved, B-should be preserved, C-may be preserved, and D-may be demolished. The final column is proposed treatment, i.e., P=preservation; AR=adaptive restoration; and P/D=preservation by documentation.

# BUILDINGS AND STRUCTURES AT DUNGENESS AWAITING PRESERVATION TREATMENT

Structure Number	Name	Level of Significance	Management Category	Proposed Treatment
HS-74	Carriage House Cistern	3	В	P
HS-82 HS-103	Garden House Frame Cottage	3	8	P
HS-104 HS-105	Frame Shed Frame House near Do	3 ock 3	C	P AR

In addition to the buildings and structures that are preservable there are several where only the masonry foundations and/or walls are preservable. The most spectacular of these ruins were stabilized. By the end of 1972 only the Carnegie Mansion and the Ice/Power House foundations had been preserved. The remainder are still awaiting preservation treatment. Particular attention will be given to the foundation of the Recreation/Guesthouse and the tabby concrete walls and pillars of a pergola that links the Tabby (Nathaniel Greene) House with the small formal garden to the north and west.

## PRESERVABLE RUINS AWAITING TREATMENT

Number		evel of Significance	Management Category	
HS-64 HS-73 HS-80 HS-81 HS-89 HS-90 HS-91	Recreation Guesthouse Foundation Water Tower Foundations Waterwheel House Foundation Greenhouse Foundation Silo Building Foundation Dairy Barn Foundation Poultry Manager's House Foundat	3 3 3 3 3	B C B B C C C	P P P P
HS-101 HS-102	Children's Playhouse Foundation Tabby Concrete Walls and Pillar	3	C B	P P

Many of the foundations identified above as preservable ruins support frame structures that have either totally or partially collapsed or have deteriorated beyond repair. These structures will be documented to the extent practical with measured drawings and photographs supplemented by written descriptions. This has been done for the Recreation/Guesthouse, Silo, and the Ice/Power House. The following structures remain to be recorded:

HS-81 HS-90 HS-91	Frame Portion of Frame Portion of	Dairy Barn
HS-92		Poultry Managers House
to 100 HS-101	Chicken Houses Frame Portion of	Children's Playhouse

Mansion Gardens--The large gardens to the southwest of the mansion contained both formal gardens and vegetable gardens on two levels and extended to the bluff along the creek. Misguided attempts to remove 30 plus years of natural vegetation from these gardens in 1974 resulted in loss of evidence of design of flower beds and location of paths. However, documentary evidence may exist that can be used to relocate these features. A small garden to the northwest of the Tabby House, though overgrown has not been disturbed.

Existing maintenance practices (mowing of open areas surrounding the mansion, village complex and other structures and ongoing clearing of woody plants and overgrowth) will be continued until a landscaping plan for the large and small gardens and pergola area is completed.

Dungeness was one of four mansions constructed by Mrs. Thomas Carnegie for herself and her children. Beginning in 1881 the Carnegies acquired all but the northern part of the island--this was acquired by the Candler family early in this century. The Carnegies and Candlers owned all but a small portion of the island when the national seashore was established. The Carnegie heirs sold most of their land to the National Park Service retaining only reserved life estates. Since 1972 other reserved estates have been granted to owners of property on the island and in early 1982 an agreement was concluded with the Candlers. In most of these agreements the holder of the estate has the rights of a private property owner. Thus, the National Park Service has no control over the treatment of historic properties within these reservations. The Carnegie estate is the only reserved estate in this district. All of the Stafford complex is held as a reserved estate and a majority of the structures at Plum Orchard are in the same category. Greyfield, the fourth Carnegie house, remains in private ownership. In addition, there are several 25-year reserved estates. Most of the reservations will expire during the first few decades of the next century. Decisions on preservation and use of the properties within the reserved estates will be made when control passes to the National Park Service.

The complex of structures at Stafford includes not only the house built in 1901 on the same site as the antebellum home of Robert Stafford, but also outbuildings—some of which may date to the pre-Civil War period. East of the house and across the main road are the remains of the slave quarters structures which represent the most significant black history site presently identified on the island.

In the last 5 years the National Park Service has moved to stabilize several of the chimneys that were in danger of collapse. This was done with the agreement of the holder of the reserved life estate. In 1982 the NPS learned that it has responsibility for maintenance of all the historic structures at Stafford. This is not true for the other reserved life estates. Except for stabilization work on the chimneys no other preservation work has taken place at Stafford. In FY 1983 preservation maintenance on the roof of the addition to the main house was completed. Preservation of other Stafford structures will be undertaken as required.

Plum Orchard is the third complex of Carnegie buildings for which the NPS has responsibility. The mansion, carriage house/stables, and approximately six small outbuildings are within the jurisdiction of the National Park Service. The remainder are parts of several reserve life estates. Some preservation work on the exterior and replacement of a portion of the mansion roof has taken place, but considerable exterior preservation work remains to be done on the mansion (HS-1).

No work has been done on the carriage house. A decision on feasibility of preservation of this structure will be made based on an architectural evaluation of the building by the NPS and the Georgia State Historic Preservation Officer. The other structures (two sheds, a boathouse, pumphouse, and several foundation remains) will be maintained and preserved.

One additional cultural resource should be mentioned—the Main Road extends from the southern to northern end of the island. Side roads lead from it to the mansions that are the dominant features of the island. The road's present alignment and its historic location remain essentially the same. South from Plum Orchard the road is used for automotive traffic, while north its main function is as a route for hikers, although vehicles owned by holders of reserved estates continue to use it.

### ARCHEOLOGICAL RESOURCES

In 1975-76 an assessment of the "Archeological and Historic Resources of Cumberland Island" was undertaken by John Ehrenhard of Southeast Archeological Center. Five prehistoric sites in the Dungeness area were identified as qualifying for the National Register. Three of the five are threatened by erosion as a result of traffic on the Inland Waterway: Salvage work has taken place on Raccoon Key West (NPS 9 CAM 4) Dungeness South (9 CAM 5) and Dungeness Wharf (9 CAM 6). Two other sites on Raccoon Key are not threatened.

Archeological resources at Stafford and Plum Orchard considered eligible for the National Register include the following: 1. The Stafford Airfield Site (NPS 9 CAM 9) in the past has been extensively and intensively used for agriculture and as a golf course, and presently is a pasture and landing strip. Measuring 1524 X 530 meters some portions of the site are covered by vegetation. Numerous small shell mounds (7 meters in diameter and half a meter high) are scattered over the site. 2. Three prehistoric sites (CAM 17, 18, and 20) and one historic site (Deptford Tabby House, CAM 44) are present at Plum Orchard. Site NPS 9 CAM 17, a (large) midden extends south from the mansion for approximately 1520 meters. Site CAM 18 may have been part of this large midden, but construction and landscaping have obliterated all evidence of contact between them. CAM 20 is located north of the mansion complex. The Deptford Tabby House or Bernardey House dates to the early 1800s and could provide additional information regarding that historic period.

# Continued Archeological Survey and Treatment

The National Park Service will continue the archeological survey of the island including the possible locations of the Spanish mission and Fort St. Andrews and the town of Barriemackie. The need for additional archeological testing at Dungeness, Stafford, Plum Orchard, and other historic complexes and sites to complement the historical information already gathered will be assessed through documentary research and field investigation. Using the results of this work, the NPS will update the Multiple Resource Nomination as needed. All archeological scopes of work on properties eligible for National Register nomination will be submitted to the Georgia SHPO for review and comment prior to implementation.

Most of Cumberland Island north of Plum Orchard has been designated as wilderness. The designation will have little effect on the two archeological zones (Table Point and Terrapin Point) and the eight sites located north of Plum Orchard. The High Point/Halfmoon Bluff Historic District on the north end of the island is on the National Register of Historic Places. High Point contains a few structures dating to the 1870s but the majority date to this century. Halfmoon Bluff, site of a black settlement dating to 1890 includes three cemeteries. The structures date from the 1930s to 1950s and have been modified by holders of reserved estates. The small church is the property of the National Park Service. Provision has been made in the designation of the area as wilderness for access to preserve this structure.

### MANAGEMENT GUIDELINES FOR CULTURAL RESOURCES

The cultural resources discussed on the previous pages and others under control of the National Park Service are managed in accordance with policies of the NPS including NPS-28, Cultural Resources Management Guideline. The latter is also by reference a part of the Programmatic Memorandum of Agreement between the NPS, Advisory Council on Historic Preservation and the National Conference of State Historic Preservation Officers. The management objective for above ground structures is to protect, preserve and utilize those significant structures in sound condition and to record and allow to deteriorate those structures that are in advanced stages of decay. Significant archeological resources will be protected and preserved while sites that are being destroyed by natural causes will be scientifically salvaged.

# NATIONAL REGISTER OF HISTORIC PLACES

In compliance with Executive Order 11593, an archeological and historical survey was made to identify and evaluate cultural features in terms of National Register criteria. After consultation with the Georgia State Historic Preservation Officer, the following properties were determined eligible for nomination.

# Prehistoric Sites

Raccoon Key East Raccoon Key Raccoon Key Dungeness South Dungeness Wharf Stafford Airfield Plum Orchard Plum Orchard Plum Orchard	NPS 9 CAM 2 NPS 9 CAM 3 NPS 9 CAM 4 NPS 9 CAM 5 NPS 9 CAM 6 NPS 9 CAM 9 NPS 9 CAM 17 NPS 9 CAM 18 NPS 9 CAM 20	Zone B, Terrapin Hush-Your-Mouth Halfmoon Bluff	NPS 9 CAM 28 Point NPS 9 CAM 31 NPS 9 CAM 33
Plum Orchard Zone A. Table Point	NPS 9 CAM 20	High Point	NPS 9 CAM 35

# <u>Historic Sites</u>

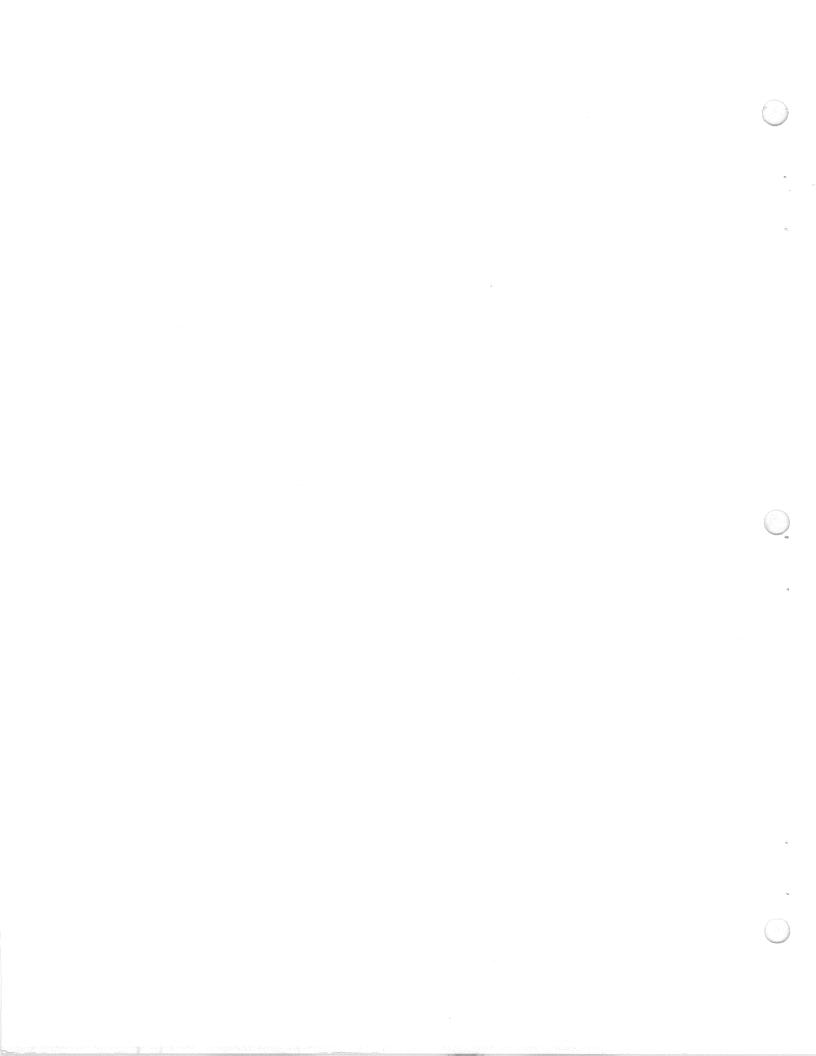
In 1977 determinations of eligibility were sought and received for four historic districts encompassing many of the above properties—Dungeness, Stafford, Plum Orchard, and the Main Road. In 1979 the High Point/Halfmoon Bluff Historic District was entered on the National Register. Presently a Multiple Resource Nomination for Cumberland Island is in preparation which will include all those properties determined by appropriate professionals to be eligible for the register.

# MEMORANDUM OF AGREEMENT

In compliance with Section 106 of the National Historic Preservation Act, as amended, (16 U.S.C. 470f) and its implementing regulations, "Protection of Historic and Cultural Properties" (36 CFR Part 800), the NPS consulted with the Advisory Council on Historic Preservation and the Georgia State Historic Preservation Officer (SHPO) regarding the proposed Cumberland Island GMP. Based on that consultation, the NPS has entered into a Memorandum of Agreement (MOA) with the Advisory Council and SHPO whereby:

- 1. The NPS agrees to complete its National Register of Historic Places Multiple Resource Area Nomination form for Cumberland Island within 90 days of ratification of the MOA.
- 2. The NPS will develop a management plan for the cultural resources of Cumberland Island in accordance with the planning outline and consultation process set forth in the September 11, 1981, amendment to the Programmatic Memorandum of Agreement between the NPS, the National Conference of State Historic Preservation Officers, and the Council, ratified December 1979.
- 3. The NPS, SHPO, and Advisory Council agree to procedures for resolving disputes regarding elements of the Cultural Resource Management Plan.

General Development Plan



# GENERAL DEVELOPMENT PLAN

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# INTRODUCTION

The management and visitor facilities required to implement the Visitor Use Plan and the Resource Management Plan for Cumberland Island National Seashore are outlined broadly in the General Development Plan.

The proposed projects and attending programs will be developed over a period of approximately 5 years; thus, requirements are generalized in recognition that needs at the time of construction may differ from those now anticipated.

## EXISTING DEVELOPMENT

# MAINLAND VISITOR FACILITIES

Through a lease agreement with the General Services Administration, the National Park Service provides headquarters on the St. Marys River in the city of St. Marys, Georgia. The headquarters and visitor facility provide administrative offices, supply storage, and boat docks. The facility also provides information, a modest level of interpretation, and reservations for round-trip boat service to Cumberland Island.

Administrative headquarters for the seashore will remain at St. Marys. Amendatory legislation will be sought to acquire land for a permanent headquarters/visitor center facility at St. Marys. The amendment would adjust the park's authorized boundary to provide St. Marys rather than Point Peter as the permanent mainland site.

Visitation to the island averages about 35,000 to 40,000 persons per year. The tour boat can accommodate 149 persons. It operates twice a day, 5 days a week, between St. Marys on the mainland and Sea Camp on Cumberland Island. However, during the summer months, the tour boat operates on a 7-day a week schedule.

Adjacent city parking is available for about 160 cars. The city provides water and sewer services, and Georgia Power provides electric service.

# ISLAND VISITOR FACILITIES

There is a development zone at Sea Camp at the southern end of the island (see Existing Development map). Visitor facilities consist of a dock, a shelter, a 16-site campground, a beach house, and an over-the-dunes boardwalk. These facilities were purchased from the Cumberland Island Holding Company. Dungeness, south of Sea Camp, is managed as a historic zone. Onsite interpretation of the historic structures is provided. One structure dates to around 1800.

There is employee housing at the south end of the island in one of the subdivisions that was once privately owned. Maintenance operations are carried out from historic structures that have been placed in adaptive use.

Primitive campgrounds accommodating a maximum of 20 persons each, are located in the middle and northern parts of the island. Little Cumberland Island (the northern part of Cumberland Island) is recognized as a special use zone. The owners have entered into an agreement with the Secretary of the Interior for the preservation of its resources, as specified in the act establishing the national seashore.

Beaches, dunes, marshes, and uplands throughout the island are managed as natural zones, wilderness, or potential wilderness.

### UTILITIES

The national seashore buys electricity from the Okefenokee Rural Electric Membership Corporation; an aboveground line crosses the marshlands but goes underground on reaching the island. Because of the susceptibility of this underground line to moisture and, sometimes breakage, there can be power outages on the island for as long as 2 days.

The park operates a radio system from its headquarters in St. Marys, with a repeater/antenna on the island in the Plum Orchard area. The repeater/antenna provides radio contact with management vehicles on the island and with personnel in boats on the Cumberland River.

Telephone service is provided by radio-telephone through Folkston, Georgia. The island's one line is shared with about 16 other parties.

Water is obtained from shallow wells and some deep wells. Existing wells are at Sea Camp, Dungeness, Plum Orchard, Little Greyfield housing area, and between Hickory Hill and Yankee Paradise primitive campgrounds. Sewage disposal is primarily by septic tank and title drain fields.

### MANAGEMENT FACILITIES

St. Marys will remain as the site of the primary mainland facility of the National Park Service.

St. Marys is undergoing a revitalization of its historic district and was nominated to the National Register of Historic Places on December 16, 1975. The district includes eight important structures including the Washington oak and pump, the waterfront, and the Oak Grove Cemetery. All are representative of the various periods (1700-1900) of the town's history. The revitalization of the city is expected to significantly alter its physical and social characteristics. The waterfront is small and intimate in scale and to maintain the historical harmony of the setting, the National Park Service will insure that the St. Marys Visitor Center remains architecturally compatible with its surroundings.

## THE DEVELOPMENT CONCEPT

## ISLAND DEVELOPMENT

#### General

The study of the wilderness character at the central and northern portions of the island, as well as recently completed archeological reports and public input, indicates that Cumberland Island development should be modest in scope and concentrated mainly at the southern end of the island. This portion of the island contains evidence of past development related to the plantation era (1785-1880). No concessions will be permitted on the island.

Historical and cultural resources are within walking distance for most visitors. From Stafford north, the island widens and becomes less developed and offers an experience of a more primitive nature. Hiking on existing trails will be available and certain routes will accentuate the interpretive values of beach, upland forest, and sound-side marsh habitats. Island interpretation will generally be accomplished through the use of museum and wayside exhibits, audiovisual programs and publications.

### Debarkation Sites

The location of Cumberland Island debarkation sites is based on the concentration of proposed day use development at the southern end of the island. Two existing dock areas have been developed, one at the Dungeness historic dock and the other at the Sea Camp dock. Both are on Cumberland Sound (see General Development map). Deep water is available at both docks and no dredging is required. These two sites are designated entry points to Cumberland Island.

Visitors primarily interested in touring the Dungeness historic sites or day use area debark at Dungeness; those who want to camp in the improved or primitive campsites will debark at Sea Camp.

A 60-foot floating dock for tour boats has been attached to the historic Dungeness dock, which has been restored and reconstructed for visitor debarkation. The historic pier has been stablized and provides an information/shelter area.

The National Park Service will provide limited tie-up space by extending the existing Sea Camp dock to accommodate private boats whose passengers will be included in the 300 visitor-a-day limit. By providing this island access for private boaters, the National Park Service can keep within overall visitation levels, particularly as they apply to wilderness carrying capacities. Boat landings on the ocean and sound side beaches will continue to be allowed for the south end of the island; however, private boaters will be encouraged to use the Sea Camp dock so that visitation levels may be accurately monitored.

The existing information center at Sea Camp may be remodeled to provide additional exhibit space. A new open-sided structure with enclosed restrooms has been constructed near the dock walkway to provide orientation, publication handouts, and schedules of interpretive programs.

Campgrounds, Picnic Areas, and Beaches

The concept for the location of these day use facilities is based on ease of access to beaches, and the possibility of allowing one of the use areas to recover while another is being used. Picnicking in the Dungeness area is often spontaneous, occurring anywhere a pleasant site is found; however, a designated picnic area has been located adjacent to the restroom facilities at the storage house/icehouse. Pedestrian access from here to the beach will be by boardwalk over the dunes.

The present Sea Camp developed campground will continue to be used, although its general alignment will be altered to some degree to allow campsite recovery and more effective screening of the nearby day-use area. The existing beachhouse will continue to provide cold showers and restrooms for day users and campers. The beach is accessible by the existing boardwalk.

# Primitive Campgrounds

The area designated as wilderness contains little development. It already holds roads that serve private inholdings and reserved estates. Existing routes, many of which are abandoned or little used will serve as trails to primitive campgrounds and will traverse beach, marsh, and upland forest environments.

Four sites in the mid to northern portion of the island will be designated primitive campgrounds. Use will not exceed 80 persons at any one time and actual campsites will be equitably disbursed and their use periodically rotated to insure minimal impact on the natural environment and the human experience. In addition, Stafford, which is situated in a more developed setting, will offer a "semi-primitive" camping experience to a maximum of 20 persons.

# Administrative Facilities

Island maintenance activities will be handled in the carriage house at Dungeness, which has been adapted for use as a maintenance area. Supplies will be landed at a ramp south of Dungeness dock. Existing structures at several locations on the island will house permanent and seasonal employees. There will be about six residences at Little Greyfield. A dormitory and one historic home at Dungeness has been converted to staff residences.

The size of the staff living on Cumberland Island will be restricted to the number needed for operational effectiveness and capability of immediate response to emergencies. Island management offices are located at the captain's house at Dungeness and at the Sea Camp visitor center. These offices will be used primarily by island personnel involved in visitor protection, interpretation, and maintenance; however, the superintendent will also maintain a part-time office on the island for management effectiveness.

The elimination of airstrips under National Park Service administration will permit the return of these areas to natural pasture or forest conditions when the retained rights expire.

Travel on the Island

Trails: The island is traversed by about 50 miles of roads, some no longer passable by vehicles. A 37-mile island-wide trail system in public areas provides access to island features for hikers (see Island Circulation and Transportation map). Trails in most instances will be along existing roads. Many roads, however, will be excluded from the trail system and allowed to revert to a natural state.

Transportation: Transportation will be needed to carry visitors between Sea Camp dock and the Plum Orchard Mansion. Since interpretive tours will be kept to small groups, a motorized vehicle with a capacity of 12 persons will be adequate. Concurrently, the feasibility of water-borne transportation between Sea Camp and Plum Orchard will be examined. Although Plum Orchard Mansion and surrounding grounds have been excluded from designation as wilderness or potential wilderness, that portion of the Main Road from the mansion to the southernmost wilderness boundary is designated as a potential wilderness addition, and is intended to change to wilderness classification at such time that all retained rights for use expire. In the event that boat access cannot be provided in a cost-effective manner, the use of motorized or nonmotorized vehicles for visitor access to Plum Orchard will continue for so long as the Main Road remains as potential wilderness.

The most sourthern part of the historic Main Road will remain the primary north-south route, with short existing side spurs leading to the improved campgrounds, and it will remain in its present condition, a narrow, shell-base (in places) road.

The use of vehicles, horses, bicycles, or other forms of transportation will not be allowed except as identified in wilderness legislation (Public Law 97-250).

#### UTILITIES DEVELOPMENT

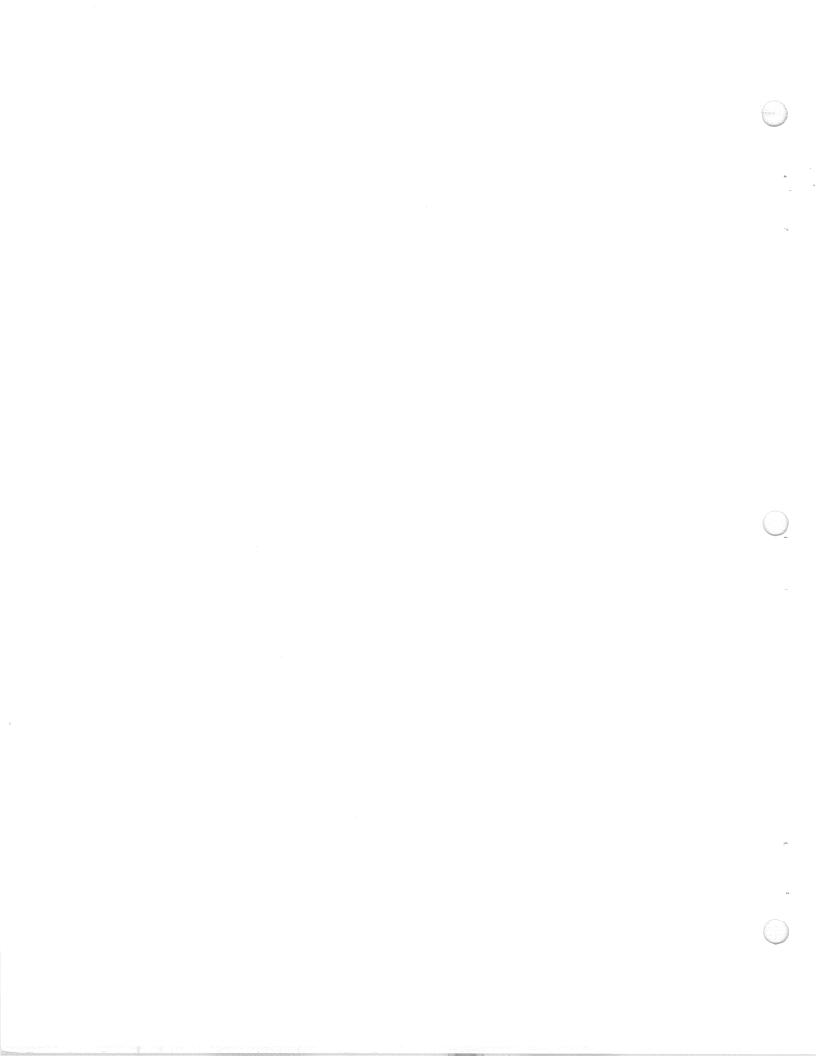
In addition to the existing wells, one shallow well will be needed at Dungeness day use area.

Several new hand-operated pumps will be necessary at the northern end of the island to provide water near the existing and proposed primitive campsites. Water quality in the area will be improved by the drilling of new shallow wells rather than deep wells, which have a high concentration of hydrogen sulfide.

Sewage disposal and the removal of other wastes in wilderness areas are discussed in the Wilderness section.

All solid waste on the island will be picked up and taken off the island for disposal on the mainland. This includes trash that backpackers will be required to carry out of wilderness areas and deposit in containers outside of the wilderness.

Sewage disposal for the southern island developments will be provided by septic tank, with disposal by tile absorption leach field. Suitable soils in most cases are immediately available for sewage disposal.



## VISITOR USE PLAN

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## SPECIAL QUALITIES OF CUMBERLAND ISLAND

The aura of isolation, in combination with the availability of a variety of natural and cultural features, provides challenging opportunities for visitor activities and resource interpretation. The mystique of Cumberland Island reflects its past as a private retreat of the wealthy, its unavailability to the general public until establishment of the seashore, its accessibility only by boat, and its relatively natural setting.

The establishing legislation specifies that no causeway be built to Cumberland Island and that access continue to be by boat. This constraint provides a novel opportunity to monitor, to some degree, almost every facet of visitor use. The number of visitors and points of entry onto the island are completely controlled, and visitor activities and impacts can be at least partially regulated by availability and scheduling of National Park Service transportation, time constraints on visitor movement into surrounding areas, and availability and variety of visitor services. Although reservations and scheduling are necessary to provide an organized visit to the island, visitors have the latitude to pursue resource interpretation in the course of a variety of activities on their own.

## FACILITIES

### MAINLAND

Visitors to Cumberland will begin their experience at the St. Marys Visitor Center. Interior and wayside exhibits will briefly describe selected natural and historical themes and will suggest ways and places where visitors might best use their time. Opportunities for campers and day users will be contrasted. The aesthetic values of the island will be presented via one or more 7 to 15 minute audiovisual programs.

## DUNGENESS

Daytime visitors who are primarily interested in the historic features of the Dungeness areas and visitors using the beach will debark here at the historic entrances to the island. The boat will dock at the reconstructed historic dock. The manned dock house will contain information about the area and interpretive options and activities available. Self-guided tours of the Dungeness ruins and grounds will also begin at that point.

The storage house/icehouse has been adaptively restored for use as a visitor facility with restrooms and a sheltered waiting room. Photographs, descriptions, and other memorabilia of the Greene-Miller and Carnegie periods are displayed for visitor enjoyment.

### SEA CAMP

Information about activities, schedules, and interpretive programs will be available at the existing visitor center. Exhibits in the planned exhibit room will be modest, with an emphasis on orientation, natural history, and involvement in island activities. A new open-sided shelter will be located near the dock walkway to provide shelter, restrooms, orientation services and campsite assignments.

### INTERPRETATION

# OBJECTIVE OF INTERPRETATION

The primary objective of interpretation will be to create a visitor sensitivity to the resources that not only will promote an appreciation and wise use of the resources, but also will sharpen the visitor's awareness of the surroundings. To accomplish this end, the National Park Service will stress individual discovery by setting a mood or encouraging an attitude of resource awareness, then encouraging visitors to draw their own conclusions and pursue their own interests.

Awareness of differences in resource sensitivity will be encouraged by a variety of interpretive means. Some of the island's resources are extremely sensitive and once disturbed either cannot be replaced (historical and archeological resources) or can only recover after long periods of time--dunes and wetlands can easily lose their natural values following disturbance. Other resources, no less valuable as interpretive features or as sources for visitor enjoyment, have a remarkable resilience, as illustrated by the past use of Cumberland Island's uplands as plantation and cotton fields, which provided subsistence support for as many as 350 to 400 people. Today, rapid recovery has prompted many to dub the island's forests as undisturbed or even pristine. Visitors, as well as planners and managers, must become aware of these differences in resource sensitivity.

# INTERPRETIVE PROGRAMS

Several types of programs will be developed to satisfy the needs of daytime visitors and of those who plan longer stays. Short programs to all-day hikes will be offered.

Island Visitors: Information sent with confirmation of boat and overnight camping reservations will alert island visitors to the available services, lack of food service, and the need to prepare before coming to the island. Island visitors will be asked to arrive at the mainland site before departure time to allow adequate time for orientation.

## Boat Ride

The boat ride to the island, an experience in itself, will not be interrupted by interpretive programs. Visitors would be free to interpret features and the relations of water, marshes, and land on their own, based upon awareness created at the mainland.

# Short Programs

The following short programs, primarily dealing with one feature each, will be developed for daytime visitors.

Dungeness: A self-guided tour with wayside exhibit panels will be provided for the Dungeness area. Persons following the tour will begin at the dock area, continue down the oak-lined road to Main Road, approach the Dungeness ruins along the formal Main Road entrance, and view the manor ruins, gardens now in a state of natural revegetation, and a waterwheel. They will then move to the Tabby House, a historic house museum depicting its use by the recordkeeper during the Carnegie habitation. Next, visitors on the tour will walk through the small, formal, restored gardens adjacent to the Tabby House, go past the duck pond, and return to the dock (see Dungeness Development Plan map).

Following this tour, visitors can either wait at the storage house/icehouse for the return ferry trip or walk to the beach.

Over-Dunes Boardwalk: A self-guided walk on boardwalks in the dunal area between Sea Camp and Dungeness will concentrate on coastal and shoreline processes, dune dynamics, and wildlife found in the dunal areas (loggerhead sea turtles, dune-nesting birds).

Upland Ecosystem: A self-guiding trail will be developed north of Little Greyfield to illustrate the upland forest ecosystem. The trail will follow existing roads.

Plum Orchard: Tours of the historic Plum Orchard Mansion will be conducted for a limited number of visitors.

Other Programs: Impromptu beach walks for shell identification or discussions may take place in response to visitor interest.

All-Day Programs

Longer interpretive programs will focus on several features, with the goal of tying together several elements of coastal ecosystems or Cumberland Island history.

Table Point: Archeological features and sound marshes and vegetation can be viewed at Table Point. Wayside exhibits may serve to tell this story.

South End Flats: An all-day unstructured walk of the South End Flats may include the following features: uplands, marshes, dunes, beaches, and a variety of wildlife. The trail may be closed to visitors during critical shorebird nesting periods. The primary interpretive medium will be a folder.

Potential Interpretive Programs

Several areas now in retained rights or under private ownership have interpretive potential and are of considerable interest. As these areas become available, they will be added to the interpretive program.

Stafford/Chimneys: Conducted or self-guided walks could illustrate the historic development of the island, the plantation era, and changes precipitated by the Civil War.

Halfmoon Bluff Settlement and First African Baptist Church and Cemetery: A settlement of blacks at Halfmoon Bluff, some of whom may be descendants of island plantation workers, has contributed to the cultural history of the island. The First African Baptist Church and other settlement structures could be used to interpret black cultural history on the island after the Civil War.

Greyfield: This historic property apparently will continue as an operating inn for so long as it is in private ownership.

#### SERVICES AND LIMITATIONS

#### TRANSPORTATION SYSTEM

Transportation will be provided to carry visitors on guided tours at Plum Orchard only.

### RESERVATION SYSTEM

Services and accommodations will be provided to visitors on a reservation basis. Visitors may hold several types of reservations for boat passage, overnight stays in improved campgrounds, wilderness permits for a specific primitive camping area, and interpretive tours. A computer terminal for reservations will be located in the visitor center at St. Marys.

### SAFETY AND SUPPORT MEASURES

Several measures will be taken to ensure visitor safety; rangers will patrol the wilderness and institute regular beach patrols; first aid supplies and trained personnel will be available on the island and mainland and helicopter evacuation is available in emergencies.

Outside the park, emergency aid is available under cooperating agreements with naval air stations and search and rescue units in St. Marys and Fernandina Beach. An early warning system and an evacuation program in case of hurricane threat are provided in conjunction with the U.S. Weather Bureau and the Coast Guard.

Community services including hospitals, groceries, and restaurants are available in St. Marys, Georgia, and Fernandina Beach, Florida. Both camping facilities and motels are available near I-95 and at Crooked River State Park just north of the city of St. Marys.

### OTHER SERVICES

The following services also will be available within the park.

#### Mainland

Ticketing and reservations
Audiovisual program for mainland and island visitors
Library and literature browsing area
Cooperative association sales of publications
Exhibits and information
Tour boat terminal and boat transportation to the island

### Island

Shelter and comfort facilities
Beach houses with showers and dressing rooms
Exhibits
Conducted tours
Self-guided walks
Camping--primitive and improved
Picnicking facilities
Informal campfire programs on a personal basis
Transportation to historic features

There will be no food service at the mainland debarkation site or on the island.

CARRYING CAPACITY

About 300 people will visit the island each day.

The effects of visitors on the biological and physical resources of the island will be monitored, and the psychological implications of increased visitor levels will be considered. Data developed by the monitoring system will provide a basis for any future consideration of adjustments in the visitation level. No major changes in visitation levels will be made without public involvement.)

Accounts of routine visual observation of the effects of visitor use on the island's resources and the perceived effects of crowding on the visitor's experience will be maintained. Photo point systems and similar visitor use monitoring techniques will be used. Further visitor use research and special studies will be programmed as specified in the park's Resource Management Plan.

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# MANAGEMENT ZONING

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# MANAGEMENT ZONING

### RESOURCE CLASSIFICATION

National Park lands are zoned to designate areas where various strategies for management and use will best fulfill management objectives and achieve the purpose of the park. Such classification is based on the inherent nature of the park resources and the suitability of the land for the proposed uses and management. A generalized system of management zoning for all National Park Service areas was developed in 1975 in order to provide consistent management strategies. In general, four major zones are recognized—natural, historic, development, and special use. Where sufficient diversity of resources exists within a major zone, special subzones may be designated to indicate that specific management is to be adopted.

All of the lands and waters within the proposed boundary have been classified under the following scheme (Management Zoning map).

### Natural Zone

The majority of the acreage within the seashore boundary is classified in subzones of the natural zone. Natural resources and processes within this zone remain largely unaltered by human activity.

Wilderness Subzone (20,558 acres): The wilderness and potential subzone includes lands, marshes, and waters described in Public Law 97-250. They will be managed to protect wilderness values.

Wilderness classification includes most of the island north of Stafford, with the exception of uplands on Little Cumberland Island. The salt marsh islands west of Cumberland, exclusive of large tidal creeks, are also designated as wilderness.

Qualified lands not now under Federal ownership, but that may within a determinable time be available for Federal management, are classified in a potential wilderness subzone. This designation includes private properties without reserved rights and the State-owned marshlands. Wilderness legislation included a clause to automatically include these lands when they become available and are acquired.

Some reserved rights are classified as potential wilderness; however, the properties will not function as wilderness until the reserved rights have been terminated. As these lands are acquired and when they qualify, they will automatically be designated wilderness. (A more detailed description of wilderness management and use for Cumberland Island is included at the end of this section.)

Environmental Protection Subzone: The lands on the south end of the island and Drum Point Island are of particular value as wildlife

habitat and have therefore been classified in an environmental protection subzone. Least tern, oyster catcher, Wilson's plover, gullbilled tern, and royal tern nest on the South End Flats; brown pelican roost south of the jetty at the tip of the island. These areas will be managed to perpetuate the wildlife values with little human intrusion.

Natural Environment Subzone: Lands in public use areas that will be used for environmentally compatible recreation activities south of Stafford are classified in a natural environment subzone. This subzone surrounds debarkation points, picnic areas, and campgrounds. Open waters surrounding the island on the ocean side, larger tidal creeks in the marshes to the west, and water in the Cumberland Sound and Cumberland River to the Intracoastal Waterway will be classified in this subzone and managed to allow activities that are based on and protective of the natural environment.

## Historic Zone

Historic and prehistoric resources eligible for nomination to the National Register of Historic Places are protected in historic zones and are scattered throughout the island. Possible activities in this zone are sightseeing, study of cultural features, and adaptive uses of historic structures. Because of the settlement pattern of the island, most of the historic structures are zoned in historic districts rather than individually. These historic districts include High Point/Halfmoon Bluff, Plum Orchard, and Dungeness complex, the Stafford/Chimneys complex, Rayfield Chimneys, and Greyfield. Other historic structures in sites within the zones include two silos north of Stafford, the presumed sites of Forts Prince William and St. Andrews, and the historic Main Road. Seventeen archeological sites and two zones on the island have also been recognized as eligible for National Register nomination.

# Development Zone

Regularly used areas including debarkation sites at Dungeness and Sea Camp, improved campgrounds, picnic areas, National Park Service housing and administration areas, will be zoned development to serve the needs of visitors and of park management.

### Special Use Zone

The private land on Little Cumberland Island will be placed in a special use zone. These lands, which are managed by the Little Cumberland Island Homeowners Association, are exempt from Federal acquisition under a trust for the preservation of resources of Little Cumberland Island.

### WILDERNESS

Public Law 97-250 (September 8, 1982) designated 11,718 acres of potential wilderness and 8,840 acres of wilderness on Cumberland Island, as shown on the Wilderness Boundary Map. Thus, a total of 20,558 acres have been approved by Congress for inclusion in the National Wilderness Preservation System. This is approximately 80 percent of the total upland of the island.

Potential wilderness includes nonqualifying lands that are surrounded by or adjacent to the 8,840-acre wilderness. These lands will, within a determinable time, qualify and become wilderness once the nonconforming conditions or uses are terminated.

Wilderness Description: The wilderness area includes biologically unique aquatic systems such as Lake Whitney, which illustrates pond succession, and a mesic bottom hardwood forest at Red Bridge that contains a large stand of old-forest growth swamp tupelo.

The Sweetwater Lake complex offers extensive breeding habitat for amphibians, shorebirds, and alligators. It also contains spectacular floral displays and the only known island colony of shoestring fern.

An island slough complex at Lake Retta provides habitat for large numbers of heron, ibis, egret, wood stork, ducks, and alligators. Swamp Field contains a large mature forest composed of exceptionally large loblolly pine, red bay, red maple, sweet bay, and other species. The site also attracts large numbers of migrating birds.

Also included in the wilderness are the marshes west of Cumberland Island owned and managed by the State of Georgia. These may be acquired by donation. The primary vegetation is salt marsh (spartina).

Island upland vegetation is mixed oak/hardwood forest that includes oak/palmetto forest and pine/oak scrub forest.

Examples of primary natural communities are pond sloughs, dune shrub thickets, and grass forb areas that provide nesting sites for gull-billed and least terns and for loggerhead sea turtles.

These wilderness management facilities and practices will be followed:

Use of Main Road: Main Road, the historic thoroughfare, traverses the island from north to south and provides access to existing reserved estates. It has been in use since about the middle of the nineteenth century. It is about 8 to 10 feet wide. The roadbed is primarily worn oyster shell, but the shell base is not consistently present throughout the course of the road; rather, it appears only intermittently.

Main Road northward from the Plum Orchard intersection, including High Point, part of Whitney (not now in Federal ownership) and South Cut Road are in the potential wilderness addition and will automatically become wilderness (trail) upon the expiration or termination of all reserved estates, and at such time as the National Park Service acquires all interest in island land formerly under Carnegie ownership. A 1964 Georgia Superior Court ruling and supplemental 1965 ruling gave the Carnegie family heirs the right of access along the Main Road.

Use of Main Road (including High Point, part of Whitney, and South Cut Roads) by park management vehicles, will be permitted as provided in wilderness legislation (Public Law 97-250).

Hunting, Fishing, and Trapping: Public Law 92-536, Section 5, provides that "the Secretary shall permit hunting, fishing, and trapping on lands and waters under his jurisdiction within the boundaries of the seashore in accordance with appropriate laws of Georgia and the United States to the extent applicable, except that he may designate zones where, and establish periods when no hunting, fishing, or trapping shall be permitted for reasons of public safety, administration, fish and wildlife management, or public use and enjoyment. Except in emergencies, any regulations prescribing any such restrictions shall be put into effect only after consultation with the appropriate State agency responsible for hunting, fishing, and trapping activities."

Hiking and Primitive Camping: Backcountry use permits will be issued by reservation for primitive campsites. Primitive campsites in wilderness areas will be provided at approximately the following locations: Hickory Hill, Yankee Paradise, Brickhill Bluff. Further study as to the suitability of either the Long Point, Terrapin Point or South Cut Road areas for this kind of use will be conducted. Camping will be limited to 20 people at each 1-acre site, with a limit of 80 overnight campers within the wilderness at any one time. Drinking water will be provided by shallow wells with hand pumps. Fires will be restricted to the designated campsites, and building of campfires on bare ground will not be permitted.

Generally, wilderness hikers will use existing trails. Backpackers will begin and end their wilderness experience near Stafford.

Sewage and Trash Disposal: It is recommended that recycling flush chemical toilets be used for the treatment of sewage at the primitive campsites in wilderness. These toilets will be serviced by foot or on horseback. They will not require vehicular access and will have minimal environmental impact.

Alternatives being considered are: Pit toilets, chemical toilets with holding tanks, low volume water flush toilets, oil flush toilets, incinerating and composting toilets. A no-toilet alternative is also being considered as there is no present evidence of human fecal matter at the existing primitive campsites.

Removal of solid waste in wilderness areas will be accomplished by a requirement that users carry out their own trash and dispose of it outside the wilderness in containers provided by the Park Service.

Electrical Service: The existing 34.5 miles of underground powerlines that cross the marshes and serve Cumberland Island were originally constructed by the Okefenokee Rural Electric Company to provide service for previously contemplated developments; however, the lines now provide power for individuals who live on the island and for National Park Service facilities. The company has recorded easements whereby its personnel will be permitted on the island to serve the distribution system as needed. The established maintenance program in wilderness areas will be allowed to continue and the underground utility corridors will be included in wilderness.

The power source for the system is on the mainland near Cabin Bluff. The line traverses the marshes on elevated poles to Table Point on Cumberland Island. Several participants in hearings suggested that the power line across the marshes be placed underground, but this is not recommended because of the possibility of damage to the marshes.

Fire Management: Lightning fires have occurred on Cumberland Island, but their role prior to man's manipulation of the vegetation is not fully understood. Fuel buildups of oak leaf litter of up to 12,000 pounds per acre have been measured on Cumberland Island.

The effects of lightning-caused fires are being documented so that the role of natural fire in the Cumberland Island ecosystem can be determined. This information will aid better understanding of the role of fire and make possible a plan for a managed fire program.

General: Beaches and interior lands in wilderness areas will be patrolled when necessary by persons on foot or on horseback.

The National Park Service will not develop a public dock at old Cumberland Wharf. This should ensure that the High Point/Halfmoon Bluff Historic District does not become either an ancillary visitor landing site or a high use area.

Feral pigs will continue to be removed in small motorized vehicles at least once a year or until all of them are gone.

The National Park Service will actively seek to reduce flights of aircraft over the island, since they tend to disturb visitors and wildlife. Other activities prohibited or permitted in wilderness areas, as defined in the Wilderness Act or in policies of the United States Department of the Interior and in National Park Service policies on wilderness, preservation and management, are listed in the Appendix.

# Other Areas Reconsidered

Approximately 2 acres at Halfmoon Bluff and 54 acres at High Point, for a total of 56 acres, (on the National Register of Historic Places as part of a historic district) have been excluded as enclaves from the wilderness proposal because the structures reflect "the works of men."